Proceedings of the 55th Hawaii International Conference on System Sciences | 2022

Introduction to the Minitrack on Business Process Technology

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Already for several decades, organizations strive to better understand, analyze, improve, and automate their business processes. Notably, recent advancements in the area of Business Process Technology, such as *process mining* and *robotic process automation* (RPA), have equipped organizations with entirely new means to achieve this goal. Process mining allows organizations to exploit transactional data recorded by information systems to improve business processes with respect to performance dimensions such as efficiency, quality, and compliance. RPA provides the means to automate repetitive and routine-like work by employing so-called software robots. Furthermore, by combining developments from areas such as machine learning and predictive analytics on the one hand with Business Process Technology on the other, process weaknesses, such as bottlenecks, cannot only be automatically identified, but also remedied by taking preventative actions.

Given the large interest in this topic in both academia and practice, the goal of this minitrack is to promote scientific exchanges on Business Process Technology. As such, the minitrack enables researchers to present and discuss innovative approaches, techniques, methodologies, and models to design, adopt, implement, operate, evaluate, and govern technology in the context of business processes.

It is the first time we are organizing this minitrack. Nonetheless, we received six valuable research paper submissions, of which we accepted three papers after the reviewing process.

Two out of the three accepted papers deal with the topic of process automation. From our perspective this is not surprising, since automation is on the agenda of almost every organization these days. These two papers address particularly interesting issues in this context. Specifically, the paper by Koch et al. considers which factors actually impede automation efforts in organizations where stakeholders are afraid of losing control. The paper from Kedziora and Smolander explores how RPA can help to respond to disasters, such as the Covid-19 pandemic. Going beyond automation, the third paper in the minitrack takes a look at how process mining can be enabled in a blockchain context through a systematic review of existing works concerned with the logging of event data in environments supported by blockchains.

Below, we provide an overview of the accepted papers, their authors, and the corresponding abstracts.

- Julian Koch, Carolin Vollenberg, Ralf Plattfaut, Andre Coners: The Fear of Losing Control - What Prevents the Automation of Business Processes in Sensitive Areas
- Damian Kedziora, Kari Smolander: Responding to Healthcare Emergency Outbreak of COVID-19 Pandemic with Robotic Process Automation (RPA)
- Leyla Moctar M'Baba, Mohamed Sellami, Walid Gaaloul, Mohamedade Farouk Nanne: Blockchain logging for process mining: a systematic review

We look forward to discussing these papers during the conference. We wish to acknowledge the contributions of all authors and reviewers to our research track and look forward to organizing another edition of the minitrack next year.

The Fear of Losing Control - What Prevents the Automation of Business Processes in Sensitive Areas

This article explores the potential barriers and drivers of end-user adoption of robotic process automation (RPA) technology in particularly sensitive process areas. For this purpose, the grounded theory method was used within a health authority to determine which factors influence the intention to use and the benefits of such solutions. RPA enables the automation of repetitive and rule-based processes. The development and usage experiences of the respective employees as users of the technology were recorded and used for conceptualization. These found constructs were then compared with those from the established scientific literature. The results show that the obvious drivers can be described in terms of "transparency" and "explainability" and that these are novelty factors compared to established RPA-specific success factors from the relevant literature.

Responding to Healthcare Emergency Outbreak of COVID-19 Pandemic with Robotic Process Automation (RPA)

During the complex emergency of COVID-19 pandemic, healthcare sector experienced challenging pressure surge, related to rapid increase in the number of infections, patient inquiries, and demand of immediate treatment. Such situation,

URI: https://hdl.handle.net/10125/80090
978-0-9981331-5-7

experienced also in Finland at the Welfare Division of Turku City, required quick decision making and fast implementation of a reliable and secure technological solution that can take some of administrative burden off the shoulders of nurses' personnel. The case presents the implementation of Robotic Process Automation (RPA) technology that has already been recognized as an efficient tool at multiple business organizations, allowing to automate various commercial processes with quick returns and scalable results. The presented case discusses the drivers and outcomes of automating non-commercial, healthcare processes, as well as its impact on emergency response, operations, and society.

BLOCKCHAIN LOGGING FOR PROCESS MINING: A SYSTEMATIC REVIEW

Considerable progress was forecasted for collaborative business processes with the rise of blockchain programmable platforms. One of the salient promises was auditable traces of business process execution, but practically that has posed challenges specially with regard to blockchain logs' structure who turned out to be inadequate for process mining techniques. Approaches to answer this issue have started to emerge in the literature, some focusing on the creation process of event logs and others dealing with their retrieval from the blockchain. This work outlines the generic steps required to solve these challenges and analyzes findings in these approaches with a consideration for efficiency and future research directions.